PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	See Form PCT/IPEA/416
PD53570PC		
International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/EP2004/006226	09.06.2004	19.06.2003

International Patent Classification (IPC) or national classification and IPC
H04M1/725, H04N7/15, H04N7/14

Applicant
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1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
   a. ☒ *sent to the applicant and to the International Bureau)* a total of 4 sheets, as follows:
      ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
      ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
   b. ☐ *(sent to the International Bureau only)* a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒	Box No. I	Basis of the opinion
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
22.03.2005	26.09.2005

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/006226

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

   ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
   - ☐ international search (under Rules 12.3 and 23.1(b))
   - ☐ publication of the international application (under Rule 12.4)
   - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-11	as originally filed

Claims, Numbers

1-29	filed with telefax on 22.03.2005

Drawings, Sheets

1/2, 2/2	as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
   - ☐ the description, pages
   - ☐ the claims, Nos.
   - ☐ the drawings, sheets/figs
   - ☐ the sequence listing *(specify)*:
   - ☐ any table(s) related to sequence listing *(specify)*:

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
   - ☐ the description, pages
   - ☐ the claims, Nos.
   - ☐ the drawings, sheets/figs
   - ☐ the sequence listing *(specify)*:
   - ☐ any table(s) related to sequence listing *(specify)*:

* *If item 4 applies, some or all of these sheets may be marked "superseded."*

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	8-21,23,26-29
	No:	Claims	1-7,22,24,25
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-29
Industrial applicability (IA)	Yes:	Claims	1-29
	No:	Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V.

1 The following document is referred to in this communication:
D1 : US 2001/048463 A1 (LUNDEN VESA) 6 December 2001 (2001-12-06)
D2: WO 01 31900 A (PINGTEL CORP) 3 May 2001 (2001-05-03)

2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.
Document D1 discloses (the references in parenthesis applying to this document): a method for forming an output media stream to be transmitted during a communication session from a portable communication device, wherein said media stream comprises signals of a first type, comprising the steps of:
generating in real time a first media stream in the portable communication device, mixing in real time the first media stream with a second media stream, for forming the output media stream (paragraph 27)
The term mixing is interpreted as combining streams which can eventually be separated at the receiver end. D1 in paragraph 27 discloses the multiplexing of an audio stream and a video stream.
The subject-matter of claim 1 is therefore not novel.

3 Dependent claims 2-7 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to novelty, since the features are already disclosed in D1 (paragraphs 7-19, 27, 34 and 38-39)

4 Dependent claims 8-21 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to inventive step, the reasons being as follows: all the features from the dependent claims (combining, delaying, superposing and blending) are already disclosed in D2. These features could easily be transposed from the fixed communication device of document D2 to a portable communication device and therefore they constitute an obvious design possibility for the skilled person.

5 Similar analysis applies to the portable communication device claim 22. Hence the

subject-matter of independent claim 22 is not new.

6 Dependent claims 24 and 25 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to novelty, since the features are already disclosed in D1 (paragraphs 7-19, 27, 34 and 38-39)

1.6 For claims 23, 26-29 similar objections apply as for dependent claims 8-21.

CLAIMS

1. Method for forming an output media stream to be transmitted during a communication session from a portable communication device (200), wherein said media stream comprises signals of a first type, comprising the steps of:

   - generating in real time a first media stream in the portable communication device (step 104),

   - mixing in real time the first media stream with a second media stream, for forming the output media stream (steps 110, 112 and 114).

2. Method according to claim 1, wherein said output media stream comprises signals of a second type.

3. Method according to claim 1, further comprising the step of transmitting said output media stream (step 116).

4. Method according to claim 1, further comprising the step of establishing a connection with another device (step 102).

5. Method according to claim 4, wherein said connection is a circuit-switched connection.

6. Method according to any previous claim, in which at least one of the steps is dependent on input data from a user of said portable communication device.

7. Method according to claim 1, wherein the step of mixing comprises mixing signals of a first type from the first media stream with signals of a second type from the second media stream.

8. Method according to claim 1, wherein the step of mixing comprises mixing signals of a first type from the first media stream with signals of the first type from the second media stream.

9. Method according to claim 8, wherein the step of mixing further comprises mixing signals of a second type from the first media stream with the signals from the second media stream.

10. Method according to claim 8, wherein the step of mixing further comprises mixing signals from the first media stream with signals of the second type from the second media stream.

11. Method according to claim 10, wherein the step of mixing further comprises mixing signals of the second type from the first media stream with signals from the second

media stream.

12. Method according to claim 11, wherein the step of mixing further comprises the step of:

- delaying, prior to mixing, signals of one type of the second media stream (step 108), in relation to the other type of signals of the same stream, for providing synchronized signals from the second media stream within the output media stream.

13. Method according to claim 10, 11 or 12, wherein the step of mixing further comprises independently mixing signals of the first type and signals of the second type (steps 110 and 112).

14. Method according to claim 9 or 11, wherein the step of mixing further comprises delaying signals of one type within the output media stream, in relation to the other type of signals of the same stream, for providing synchronized signals from the first media stream within the output media stream.

15. Method according to claim 9, wherein the step of mixing signals, where the signals of the first type are audio signals, further comprises the step of superposing the signals of said first type.

16. Method according to claim 15, wherein the step of superposing comprises weighting properties of the audio signals from the first media stream and the second media stream.

17. Method according to claim 9, wherein the step of mixing signals, where the signals of the first type are image signals, further comprises the step of blending the signals of the first type.

18. Method according to claim 17, wherein the step of blending comprises weighting properties of the image signals from the first media stream and the second media stream.

19. Method according to claim 16 or 18, wherein weighting properties includes varying the proportion of signals from the first media stream in relation to the proportion of signals from the second media stream.

20. Method according to claim 19, wherein the weighting properties is dependent on input data of a user of said portable communication device.

21. Method according to claim 19, wherein the varying said proportions comprises varying of each proportion within the range between 0 and 100%.

22. Portable communication device (200) for forming an output media stream to be transmitted during a communication session from said portable communication device (200), wherein said output media stream comprises signals of a first type, said portable communication device (200) comprising:
    - at least one generating unit (206, 208) provided for generating a first media stream (step 104),
    - a first mixing unit (216), connected to said generating unit, provided for mixing in real time the first media stream with a second media stream (steps 110 or 112), and
    - a control unit (204) controlling the generating unit and the mixing unit (216), in dependence of user input.

23. Portable communication device (200) according to claim 22, for forming an output media stream to be transmitted during a communication session from said portable communication device (200), wherein the first mixing unit (216) is provided for mixing signals of the first type of both the first and the second media streams (steps 110 or 112), wherein the output media stream comprises signals of the first type and a second type, wherein the portable device (200) further comprises:

    - a second mixing unit (218),

    for mixing signals of the second type of the first media stream and signals of the second type of the second media stream by using the second mixing unit (218).

24. Portable communication device (200) according to claim 22 or 23, further comprising:

    - a memory unit (210) for providing storage for the second media stream.

25. Portable communication device (200) according to any one of claims 22-24, further comprising:

    - a user input interface (202) for providing user input.

26. Portable communication device (200) according to claim 23, wherein said device (200) further comprises:

    - a multiplexing unit (220) for providing synchronization of signals of one type from the first media stream in relation to signals of the other type from the same first media stream, within the output media stream.

27. Portable communication device (200) according to any one of claims 23-25, further comprising:

- a delaying unit (214) for providing synchronized signals within the output media stream.

28. Portable communication device (200) according to claim 27, where the delaying unit (214) provides synchronization of signals from the second media stream, prior to mixing with the first stream.

29. Portable communication device (200) according to claim 28, where the delaying unit (214) provides synchronization of signals of one type in relation to signals of the other type from the same second media stream.